

GE Healthcare

Education Services

Invasive Cardiology

2011 Technical Education



imagination at work

Invasive Cardiology

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Technical Service Training Tailored to Fit Your Needs!

Education Centers

Waukesha, WI - The GE Healthcare Institute is a state of the art facility providing a dedicated learning environment with over 210,000 square feet of learning space including 75 labs and 25 classrooms.

Blended Curriculum - Our technical service training offers a blended curriculum with web-based and in-resident courses. Our integrated training platform minimizes the time you spend away from home.

- **Web-based Courses**

Introductory, pre-requisite, and some differences courses are available for independent study.

- **In-Resident Courses**

(Classroom/Lab) Advanced courses held at the GE Healthcare Institute provide invaluable and practical hands-on training taught by industry-leading instructors.

Differences Courses - Tailored specifically for those who have previous training on GE Diagnostic Imaging Equipment and designed to bring you up to speed on the latest technology and equipment.

GE Health and Safety Policy

GE Healthcare requires students to wear closed-toe and closed-heel shoes while attending training. Safety toe-shoes are required, but steel-toe shoe covers are available in the classroom. Open-toe, high-heel shoes or sandals are not permitted.

About Technical Education from GE Healthcare

GE Healthcare Education Services delivers technical education for Diagnostic Imaging, Computed Tomography, Magnetic Resonance, Mammography, Nuclear Medicine/PET, Ultrasound, Monitoring, Diagnostic Cardiology, Infant Care and Anesthesia Delivery Systems and Respiratory products. We also offer a curriculum of Healthcare IT classes focused specifically on the needs of today's biomedical and technical professionals.

Our goal is to be recognized as the global leader in healthcare education solutions.

- Building customer knowledge and competencies through a diverse educational portfolio in an increasingly complex healthcare environment.
- Striving to exceed customer expectations by delivering exceptional quality education that is clinically relevant and has a measurable impact on practice.
- Be a provider of choice for Healthcare IT education regardless of medical equipment choices, previous learning or experience.

Added value for your education investment

College credit is available for many of our classes, both technical and Healthcare IT, through the University of Phoenix and DeVry University. If you are working toward a degree, or contemplating one, these classes may bring you closer to completion. Visit www.gehealthcare.com/training and choose "College Credit for Technical Training" for more information on these programs.

Contact our registrar for more information.
EdServices@ge.com
or 1-888-799-9921 press option 2

Registration Instructions

To download the Registration form, go to www.gehealthcare.com/education (under Technical Service Education, select Diagnostic Imaging: GE). Click on the "Register" button and download the Service Training Application Form (pdf). After completing this form, fax to: 262-574-8627, Attn: Registrar, GE Technical Service Training. Or e-mail to: EdServices@ge.com

After your application form is received/approved, the Registrar will contact the student to confirm dates, course prerequisites, and housing details (if In-Resident). After attendance and payment details are confirmed, a formal confirmation letter will be sent. For current course information, pricing, registration, or lodging information, please visit our web site.

Policies and Terms

- Accepted via email or phone: 888-799-9921 or edservices@ge.com
- Must be received 15 business days prior to the course start date
- A \$1,000 per week "no-show" or cancellation fee will be incurred if a student does not show up for class or does not cancel before the 15 business day window
- GE reserves the right to cancel or reschedule any class. GE will not be held responsible for any travel costs incurred due to causes beyond our control, such as, but not limited to, hurricanes, tornados, or strikes

Attendance

- Students are required to arrive on time for class.
- Class start and end times vary. Please refer to your e-mail enrollment notification.
- A "no-show" is not eligible for tuition reimbursement.
- Students must pass an assessment to receive certificate of successful completion.

Cancellations

Please note that should cancellation of this class become necessary, less

than 20 working days (1 month) prior to the course start date, the following cancellation fees will be in effect: Please contact the Training Registrar directly if cancellation is necessary.

- Courses with a duration of one week or less: \$1,000
- Courses with a duration of two weeks or less: \$2,000
- Courses with a duration of three weeks or less: \$3,000

Low Enrollment

GE Healthcare reserves the right to cancel classes due to low enrollment. Classes with low enrollment 15 business days prior to the scheduled date will be cancelled. Please consider this when booking your travel.

When GE Healthcare cancels a class, tuition will be refunded in full. Alternatively, tuition may be applied to the cost of another class scheduled to take place within 12 months of the original class.

GE Healthcare will not be held responsible for any travel costs incurred due to circumstances beyond our control, such as, but not limited to, hurricanes, tornados, or labor strikes.

In-Resident Training at the GE Healthcare Institute

For your convenience during your in-resident training, there are onsite meal services and condominium accommodations conveniently located across the street from the Healthcare Institute.

Program Managers

CT/PET & Cross Modality:

Joel Jensen Joel.Jensen@ge.com

MR:

Brian Adams Brian.Adams@ge.com

Nuclear Medicine & Radiopharmacy:

Stacy Marten Stacy.Marten@ge.com

X-ray:

Dan Pittenger Daniel.Pittenger@ge.com

Note: Most courses have the following special considerations: A functioning laptop computer with a CD-rom reader, network card and a modem card is required for use during this course. The browser on the computer must be IE4 or Netscape 4.5 or higher. Minimum system requirements include 133 MHz Windows 95, NY 4.0 or higher 32 MB of RAM 16-bit color display adapter.

MacLab IT 6.0/6.5

The MacLab IT 6.0/6.5 class provides students with an overview of the system as well as the practical skills to troubleshoot and configure the system. It covers the Acquisition system, DMS Server, and basic clinical applications and distinguishes between the individual hardware components. Participants learn hands-on skills in labs designed to reinforce principles reviewed in class.

Course Competencies:

- Identify system components
- Understand the MLIT 6.0 enhancements
- Explain the dataflow and workflow of the system
- Understand and maintain system dataflow from an administrative level
- Service and troubleshoot the system Acquisition System Disaster

Pre-Requisites Required:

MicroPace Basic (Web)	R0174RY	\$545
Networking and DICOM Basic for DI Service (Web)	R0907CM	\$2,590



Product Price:

R0168RY \$6,165

Delivery Method: Web

Length of Course: 40 hours

Program Information:

For the most current course information and pricing, please visit us at www.gehealthcare.com/education (under Technical Service Education, click on Diagnostic Imaging: GE).

Mac-Lab/CardioLab v6.8 Difference (Web)

The Mac-Lab/CardioLab v6.8 Differences Customer CBT is for the customer already trained on Mac-Lab/CardioLab 6.0/6.5 and is requesting training on a 6.8 system without the following integrated features: CardioICE, CA1000, and/or FFR. In the event a customer wants training on Mac-Lab/CardioLab v6.8 with the integrated CardioICE, CA1000 and/or FFR, attendance would be required to the Mac-Lab/CardioLab v6.8 instructor-led training course regardless of their past training experience.

Product Price:

R0187RY

\$1,625

Delivery Method: Web**Length of Course:** ??? hours**Program Information:**

For the most current course information and pricing, please visit us at www.gehealthcare.com/education (under Technical Service Education, click on Diagnostic Imaging: GE).

MicroPace Basic Service Training (Web)

The MicroPace Service Training provides the necessary tools to enable the student to effectively install and service the MicroPace EPS320 Cardiac Stimulator. This self-guided CBT contains four comprehensive modules:

- Overview
- Installation
- System Verification
- Troubleshooting

Product Number:

R0174RY

\$545

Delivery Method: Web

Length of Course: 1 hour

Program Information:

For the most current course information and pricing, please visit us at www.gehealthcare.com/education (under Technical Service Education, click on Diagnostic Imaging: GE).

Networking and DICOM Basic for DI Service (Web)

This will prepare the Service Engineers in configuring and troubleshooting networks, which use the DICOM protocol for transferring patient data and how to read and use DICOM Conformance Statements. This course covers the following:

- Theory, introduction to 7 layers OSI and 5 layer TCP/IP protocols (Basic model only)
- Identify hardware used in networking, review of the most used networking devices, Cables, NIC, Switch and Routers
- Simple network connection with 2 to 5 devices
- DICOM definitions, theory and configuration
- Reading DICOM Conformance statements
- Installation, IP and DICOM configuration details
- Simple Network trouble-shooting using telnet, ping and DICOM ping

Product Price:

R0907CM

\$2,590

Delivery Method: Web**Length of Course:** 13 hours**Program Information:**

For the most current course information and pricing, please visit us at www.gehealthcare.com/education (under Technical Service Education, click on Diagnostic Imaging: GE).

Essentials of Healthcare ITSM

This instructor-led class is specifically designed for technical professionals responsible for the installation and support of medical devices and the networks interconnecting them. The class is taught by highly qualified technical trainers and will focus on developing the practical skills needed by a biomedical engineer to interface with networked devices in healthcare today. Extensive labs with plenty of hands-on time allows the student with no previous IT training to gain confidence in this new and exciting arena. The class will build and troubleshoot flat, switched, routed, and wireless networks. Basic computer skills are required.



Intended Audience

- Biomedical equipment technicians
- Biomedical and clinical engineers
- Biomedical and clinical engineering managers
- Medical technology managers
- Hospital IT staff
- Any professional who supports the field of medical technology

Purchase Packages:

Tuition:

R0248PG \$3,850

Tuition & lodging:

R0249PG \$4,775

Tuition, lodging & air:

R0250PG \$5,670*

* US only

Delivery Method: Classroom

Length of Course: 5 days

Course Location:

Please visit www.gehealthcare.com/training for the most current information on dates and locations.

Securing the Healthcare IT EnvironmentSM

This instructor-led class is specifically designed for technical professionals responsible for the secure transport of electronic protected health information across healthcare IT infrastructures. This class is taught by experts in the healthcare IT field and topics include: a global security overview, relevant HIPAA Title II Privacy and Security Rule information, the top 10 HCIT network attacks and ways to prevent them, strategies to mitigate risk, and securing a home network. Hands-on labs include password cracking, configuring biometric identifiers, encryption, port scanning, using network analyzers, software firewall configuration, performing an MD5 Hash, and home router configuration. Students will perform a risk analysis of medical devices using MDS2 documentation and ACCE/ECRI tools. Basic computer skills and TCP/IP network troubleshooting techniques are required.



Intended Audience

- Biomedical equipment technicians
- Biomedical and clinical engineers
- Biomedical and clinical engineering managers
- Medical technology managers
- Hospital IT staff
- Any professional who supports the field of medical technology

Purchase Packages:

Tuition:

R0265PG \$5,000

Tuition & lodging:

R0266PG \$5,925

Tuition, lodging & air:

R0267PG \$6,820*

* US only

Delivery Method: Classroom

Length of Course: 5 days

Course Location:

Please visit www.gehealthcare.com/training for the most current information on dates and locations.

Required IT Skills:

- GE Essentials of Healthcare IT or equivalent

For list of core IT skills, see chart on the Student Information page.

Wireless in the Healthcare IT EnvironmentSM

This vendor-neutral class focuses on the installation, management, and troubleshooting of RF technologies in healthcare today; including WMTS, 802.11, RFID, and cellular communications. Topics include RF and antenna basics, common interference sources in healthcare, remote patient viewing using the Wireless Medical Telemetry Service (WMTS), 802.11 and access point configuration including wireless VLANs, RFID basics, cellular communications, and security requirements for wireless systems. Students receive hands-on training with network analyzers and spectrum analyzers, perform site surveys for WMTS and 802.11, and troubleshoot WMTS antenna systems.



Intended Audience

- Biomedical equipment technicians
- Biomedical and clinical engineers
- Biomedical and clinical engineering managers
- Medical technology managers
- Hospital IT staff
- Any professional who supports the field of medical technology

Purchase Packages:

Tuition:

R0268PG \$5,000

Tuition & lodging:

R0269PG \$5,925

Tuition, lodging & air:

R0270PG \$6,820*

* US only

Delivery Method: Classroom

Length of Course: 5 days

Course Location:

Please visit www.gehealthcare.com/training for the most current information on dates and locations.

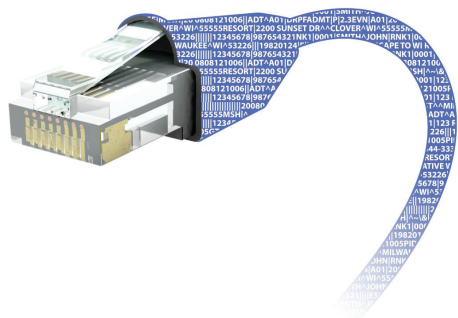
Required IT Skills:

- GE Essentials of Healthcare IT or equivalent

For list of core IT skills, see chart on the Student Information page.

Essentials of HL7®

This vendor-neutral class prepares the student to configure and troubleshoot HL7. Focusing on V2.x, students will learn to use the HL7 standard as a reference source as well as vendor conformance documents to aid in interface design. Topics include the structure and encoding of common patient administration, order, results, and billing messages, as well as interface design, data mapping, and vocabulary. Common troubleshooting techniques will be discussed and class concepts will be reinforced through use of the HL7 Messaging Workbench software. This instructor-led course is open to anyone wanting a more in-depth insight into HL7, regardless of equipment choice in the healthcare environment.



Intended Audience

- Biomedical equipment technicians
- Biomedical and clinical engineers
- Biomedical and clinical engineering managers
- Medical technology managers
- Hospital IT staff
- Any professional who supports the field of medical technology

Purchase Packages:

Tuition:

R0344PG \$2,350

Tuition & lodging:

R0345PG \$2,905

Tuition, lodging & air:

R0346PG \$3,800*

* US only

Delivery Method: Classroom

Length of Course: 3 days

Course Location:

Please visit www.gehealthcare.com/training for the most current information on dates and locations.

Essentials of DICOM®

This instructor-led course prepares the participant to become proficient in the installation, maintenance and troubleshooting of DICOM on digital imaging networks. Participants will learn to use the DICOM standard as a reference source, analyze conformance statements for predicting connectivity, configure and use DICOM simulators, and capture and analyze DICOM traffic using freeware tools like the DICOM Validation Toolkit.



Intended Audience

- Biomedical equipment technicians
- Biomedical and clinical engineers
- Biomedical and clinical engineering managers
- Medical technology managers
- Hospital IT staff
- Radiologist
- Any professional who supports the field of medical technology

Purchase Packages:

Tuition:

R0307PG \$3,500

Tuition & lodging:

R0308PG \$4,055

Tuition, lodging & air:

R0309PG \$4,950*

* US only

Delivery Method: Classroom

Length of Course: 3 days

Course Location:

Please visit www.gehealthcare.com/training for the most current information on dates and locations.

Required IT Skills:

- GE Essentials of Healthcare IT or equivalent

For list of core IT skills, see chart on the Student Information page.

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Contact your GE representative for the most current information.

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